Patent Claims:

1. Method for the indirect tire pressure monitoring, c h a r a c t e r i z e d by the steps of:
   - Learning of test variables (DIAG, SIDE, AXLE), which describe the rotational movements of the wheels,
   - Determining of rolling circumference differences (ΔDIAG, ΔSIDE, ΔAXLE) from actually determined test variables and the learnt test variables,
   - Learning of at least one torsion natural frequency f_P for at least one tire from the oscillation behavior of the individual tires,
   - Determining at least one shift of the torsion natural frequency Δf_P from at least one actually determined torsion natural frequency and from the at least one learnt torsion natural frequency, and
   - combining the rolling circumference differences (ΔDIAG, ΔSIDE, ΔAXLE) with the at least one shift of the torsion natural frequency f_P in a joint warning strategy for detecting and warning of tire inflation pressure loss.

2. Method as claimed in claim 1, c h a r a c t e r i z e d in that the learning operation is not started until an automatically or manually generated signal (reset).

3. Method as claimed in claim 1, c h a r a c t e r i z e d in that the learning operation is executed while the tires heat up and/or cool down.

4. Method as claimed in claim 1 or 3, c h a r a c t e r i z e d in that the learning operation is executed in several different speed intervals, and/or wheel torque intervals, and/or lateral acceleration intervals.

5. Method as claimed in claim 1, c h a r a c t e r i z e d in that initially only the rough position of the torsion natural frequency f_p is determined in a wide frequency range, in particular in the frequency range of roughly 20 hertz to roughly 60 hertz, with a coarse frequency resolution, in particular with a frequency resolution of 1 hertz approximately.

6. Method as claimed in claim 5, c h a r a c t e r i z e d in that subsequently a range is defined around the approximate position of the torsion natural frequency f_p, in which the precise position of the torsion natural frequency f_P is determined with a fine frequency resolution, in particular with a frequency resolution of 0.5 hertz approximately.

7. Method as claimed in claim 3, c h a r a c t e r i z e d in that the complete heating and/or cooling of the tires is detected from a uniform increase or reduction of the torsion natural frequencies f_p of all tires to an almost constant final value.

8. Method as claimed in claim 3, c h a r a c t e r i z e d in that the change of the outside or ambient temperature is evaluated with respect to the heating/cooling of the tires.

9. Method as claimed in claim 3,
c h a r a c t e r i z e d in that a rain sensor is evaluated with respect to the heating/cooling of the tires.

10. Method as claimed in claim 3,
c h a r a c t e r i z e d in that the length of a vehicle immobilization time allows obtaining information about the condition (cold or warm) of the tires.

11. Method as claimed in claim 1,
c h a r a c t e r i z e d in that a warning regarding tire inflation pressure loss is issued when at least one rolling circumference difference (ΔDIAG, ΔSIDE, ΔAXLE) or at least one shift of the torsion natural frequency Δf_P exceeds a previously fixed coarse threshold.

12. Method as claimed in claim 1,
c h a r a c t e r i z e d in that a warning regarding tire inflation pressure loss is issued when the shifts of the torsion natural frequencies Δf_P of all wheels exceed a previously fixed fine threshold.

13. Method as claimed in claim 1,
c h a r a c t e r i z e d in that a warning regarding tire inflation pressure loss is issued when at least one rolling circumference difference (ΔDIAG, ΔSIDE, ΔAXLE) as well as at least one shift of the torsion natural frequency Δf_P exceeds previously fixed fine thresholds.

14. Method as claimed in claim 13,
c h a r a c t e r i z e d in that a warning regarding tire inflation pressure loss is issued only when the correlation between the rolling circumference differences (ΔDIAG, ΔSIDE, ΔAXLE) and the shifts of the torsion natural frequencies Δf_P exceeds a predetermined limit value which indicates tire inflation pressure loss with an appropriate likelihood.

15. Method as claimed in claim 1,
c h a r a c t e r i z e d in that in the joint warning strategy, the (warning) thresholds of the rolling circumference differences (ΔDIAG, ΔSIDE, ΔAXLE) for warning of tire inflation pressure loss are adapted depending on the shift of the torsion natural frequency Δf_P.

16. Method as claimed in claim 1,
c h a r a c t e r i z e d in that in the joint warning strategy, the (warning) thresholds of the rolling circumference differences (ΔDIAG, ΔSIDE, ΔAXLE) for warning of tire inflation pressure loss are adapted depending on the shift of the torsion natural frequency Δf_P and on the correlation between the rolling circumference differences (ΔDIAG, ΔSIDE, ΔAXLE), and on the shifts of the torsion natural frequency Δf_P.

17. Computer program product,
c h a r a c t e r i z e d in that this product defines an algorithm comprising a method as claimed in at least any one of claims 1 to 16.